

Utah Statewide Mercury Work Group

Meeting Summary of February 8, 2006 Meeting

1. Introductions

John Whitehead welcomed all in attendance. All stakeholders and people in the audience introduced themselves and indicated who they represented.

2. Review of Minutes

John Whitehead asked the group if there were any questions or changes regarding the minutes of the November 10, 2005 meeting. He also informed the group that Jeff Salt had requested that the Briefing on GSL Mercury Local Workgroup to be the first agenda item of the day. John Whitehead then introduced Jennifer Cummings, as the meeting facilitator.

3. Briefing on Great Salt Lake Mercury Local Workgroup

(Jeff Salt)

Mr. Salt indicated that citizen based groups had raised attention relative to the mercury issues in Utah and that these groups have not been properly recognized. Salt also felt that there has not been any recognition for the projects or efforts related to his group relative to mercury issues. Salt also asked that his group receive more notoriety for their efforts. He also asked why anglers are not credible enough for fish collection which could then be sent in for lab analysis. He believed the mercury group was a proper forum since it is a collaborative approach, but believes the state opposes a watershed level workgroup. The first anniversary of the mercury issue being brought forth to the public is Friday, February 10, 2005 and a conflict with state agencies is not promoting citizen based projects. Salt also mentioned that the data on mercury is not being carefully reviewed by the state (high mercury levels in GSL). There was also a concern that the state is not working with or using data from federal agencies. Salt believes that the state has the obligation to protect its people and resources, but that doesn't mean it has a monopoly. State officials need to act as a leader and stay focused on the issue.

4. USFWS Eared Grebe Mercury Study Proposed for the GSL

(Nathan Darnall)

Mr. Darnall presented a power-point on the "Dynamics of Mercury in Eared Grebes on the Great Salt Lake." He included a discussion of the funds and stakeholders in the study. Eared grebes were used in the study because of their large dispersal patterns, their eating habits (brine-shrimp), previous data records, and there is a control population in Mono Lake, CA. Darnall explained his study designs, study timing, study hypotheses, study objectives, and management implications as well.

Q- Are grebes being sampled at one location or various dispersed locations on the lake? *(Cheryl Heying)*

A- Birds are being sampled in a couple of locations, but will mostly be picked from a general area.

Q- What are the water quality differences between Mono Lake and the GSL?
A- Doesn't know of any, but is sure data is out there.

Q- Can this study be associated with both mercury and selenium sampling together? (*Walt Baker*)
A- If proper coordination was brought forth it would be possible.

Q- Is this data/report dispersed and available?
A- It will be available in a year.

Q- What are the sources of selenium and mercury; are there any other metals? If we don't know the source how can we solve the problem?
A- This study won't show a source, but will focus more on answering local questions.

Q- Is there an opportunity for us [Great Salt Lake Keeper] to collect grebes? (*Jeff Salt*)
A- Collection could be done if done properly. However, funding, etc. is an issue.

Q- Why can't water chemistry data and invertebrate data, that has already been collected, be used?
A- There is no data available that indicates values that are above limits.

Comments: One stakeholder suggested that the sample size needed to be larger than seven grebes.

5. Mercury and Selenium Data from the GSL

(*Nathan Darnall*)

Reports will be available in June of this year. Darnall asked that data presented today not be published without consulting him.

Q- Do you plan on getting methyl mercury data?
A- There will be a subset on meHG sampling.

6. Mercury Source Reductions Efforts

(*Sonja Wallace*)

Ms. Wallace discussed the current projects that are working on mercury reductions in the community:

- Auto salvage- Incentives created to increase response of voluntary collection program of mercury switches.
- Hospitals- Coordination with the EPA to initiate H2E program in Utah.
- Schools- Currently applying to EPA for grant funds to work with Utah schools for chemical cleanouts stored in labs, cupboards, etc., over time.
- Public- Have formed a thermometer exchange program and also have in the works producing a mercury brochure for public concern and clean-up.

- National- The Environmental Council of States (ECOS) and sub-committee Quicksilver Caucus (QSC) is designed to share and coordinate mercury information between states and other NGO's.

Q- What is included in the proposed HB 138?

A- The bill goes beyond to provide incentives for salvage yards (five dollars per switch).

Comment- Like the incentive idea, but there needs to be more attention with soil projects and mining events as well.

Follow-up- Nevada is working on a group for mining practices. There are also permits for sources of pollution to prevent mining pollution. (*Cheryl Heying*)

Q- What about mercury used for mercury rituals? (Questions based from handout)

A- These rituals are not found here in Utah, but in some southern states.

7. Mercury Analysis at State Lab; Status Report

(*Sanwat Chaudhuri*)

Ms. Chaudhuri gave a power-point presentation entitled, "Hg Analysis in Fish Matrix." The procedures and operations used at the state lab on fish tissue sampling were discussed. The method used for analysis is EPA 7473. Method goals are to have high accuracy, high precision, high quality assurance, and to process fifty samples per week. Chaudhuri also discussed method validation, assuring quality measurements (calibration curves analyzed and modeled), quality assurance (reduce contamination sources), sample analysis, challenges, and material costs.

8. Report on Hair Sampling for Mercury

(*Tim Wagner*)

Mr. Wagner presented an overview of a human hair mercury analysis program conducted in numerous locations in the United States in 2005. Hair clipping events were performed around the state in June. Kits were available for purchase to be sent in to a lab and analyzed. The hair study showed the most comprehensive exposure rates (largest study conducted) in the U.S. to date. There were a total of 6,600 participants. All participation was voluntary. 1.0 μ g/g was the EPA reference dose for hair. Men generally had higher rates than women. In Utah, >15% of all participants (139) have Hg levels at or above the benchmark of 1 ug/g.

Q- Was there an analysis of participants being just over the limit level or highly above the level?

A- Yes

Q- Were levels between fish species being consumed studied; fresh fish vs. ocean fish? (*Nathan Darnall*)

A- No

Q- Was there any indication of variance in tribal lifestyles; cultures who may eat more fish than others?

A- Asian populations had higher levels.

9. Workgroup Goals

Need to meet on a quarterly basis (three or four more meetings this year). The 2006 Goals worksheet is what should be focused on throughout the group.

Goals:

- Prioritize (need an overall objective)
- Identify and minimize risk
- Develop models for mercury (consistent protocols)
- Coordinate between agencies
- Method for listing streams/waterbodies
- Funding for research
- Status (where are we?)
 - Need more information on Hg.
 - Where is Hg found most (vegetation, insects, fish, soil, etc.)?
- Fisheries program/agenda.
- Share data.

10. Next Meeting

Goals identified in this meeting will be prioritized/shaped for the next meeting.

Cheryl commented on getting Indian tribes involved with issue.

A request was made to have someone talk about recent rulemaking related to Hg issues in Nevada (Cheryl will coordinate).

A suggestion was made to get a speaker to talk about the carp fishery out of Utah Lake being sent to the Bay area.

Collection and preparation protocol will also be discussed by John Whitehead.

A review on the hair study will be presented by Wayne from UDOH.

A report on 2005 fish sampling will be made.

A request to hear about the Lake Powell fish results was made.

Someone also suggested a talk on legacy mining activities (identify issues, discuss abandoned mine issues).

The next meeting is May 9th; 9:00 – 11:30 a.m. in room 101 of Building 2 (DEQ)